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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 July 2009</u>.

2a)☒ This action is FINAL. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,5-7,9,10,12,16-18,21-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5-7,9,10,12,16-18,21-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of the Claims

1.   This is in response to applicant's amendment filed 7/2/09. Claim 1 has been amended

and no claim has been cancelled. Therefore, Claims 1-7, 9, 10, 12, 16, 17, 18 and 21-30 are

pending in the application.

2.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

Claim Rejections - 35 USC § 103

3.   Claims 1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30 are

rejected under 35 U.S.C. 103(a) as being unpatentable over Teich (US 2003/0016139) in view of

Chuey et al. (US 7,050,794).

        Regarding Claim 1, Teich discloses a radio frequency transmitter (Abstract, Fig 1)

integrated into a vehicle interior element ([0025]) and configured to send radio frequency

messages to activate a remote system (Abstract, Fig 1), wherein the transmitter is configured to

send at least two of the messages sequential values in response to a single user input (64 of Fig 4,

[0049]).

        However Teich doesn't disclose messages including a sequentially encrypted rolling

value.

        In the same field of endeavor, Chuey discloses a universal remote control used to train

one or more appliances, where the appliance is activated by a rolling code activation signals

transmitted until successful. The messages include a sequentially encrypted rolling value
(Abstract, Fig 3, Col 5 Lines 32-47; *the reference teaches plural signals sent to activate one
device*).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the
invention was made to modify Teich with Chuey in order to ensure a successful transmission of
the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 2, Teich discloses a radio frequency transmitter, wherein each message
includes a transmitter identifier (60 of Fig 4).

Regarding Claim 3, Teich discloses a radio frequency transmitter configured to send the
at least two messages during a training operation (64 of Fig 4).

Regarding Claim 4, Teich discloses a radio frequency transmitter configured to send at
least three messages in response to the single user input (64 of Fig 4).

However Teich doesn't disclose using sequential encrypted rolling values.

This limitation is addressed with regard to Claim 1.

Regarding Claim 5, Teich discloses a radio frequency transmitter configured to send the
at least two messages each of the first N times the single user input is actuated (Fig 4), wherein N
is at least two, and thereafter to send one of the messages in response to a single user input
([0050], *after the transmitter is trained a single user input will activate the receiver*).

However Teich doesn't disclose using encrypted counter values in sequence.

In the same field of endeavor, Chuey discloses using encrypted counter values in
sequence (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a successful transmission of

the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 6, Teich discloses a radio frequency transmitter wherein the transmitter

is configurable by a user to activate a remote system using radio frequency messages (Abstract,

Fig 1).

However Teich doesn't disclose using the transmitter to activate a plurality of different

remote systems.

In the same field of endeavor, Chuey discloses using the transmitter to activate a plurality

of different remote systems (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid

false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 7, Teich discloses a radio frequency transmitter configured to identify

at least one remote system based on a radio frequency signal associated with the at least one

remote system (Abstract, Fig 1, *the receiver is in contact with the transmitter and so must create

a handshake that identifies it as the garage door opener*).

However Teich doesn't disclose a transmitter identifying different remote systems based

on signals from an original transmitter associated with the remote system.

In the same field of endeavor, Chuey discloses a transmitter identifying different remote

systems based on signals from an original transmitter associated with the remote system

(Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid

false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 9, Teich discloses a radio frequency transmitter configured to identify

at least one remote system based on a user input (Abstract).

However Teich doesn't disclose identifying a plurality of different remote systems.

In the same field of endeavor, Chuey discloses identifying a plurality of different remote

systems (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid

false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 10, Teich discloses a radio frequency transmitter configured to control a

garage door opener (Abstract).

Regarding Claim 12, Teich discloses a radio frequency transmitter configured to send the

two messages sequentially ([0050]).

Regarding Claim 16, Teich discloses a method of providing a transmitter identifier to a

receiver configured to control a system (Abstract, 62 of Fig 4), comprising:

in a training mode, receiving a single user input (Fig 2, [0046]); and

in response to the single user input, transmitting a plurality of messages to the receiver (Fig 4,

[0050]); and

in an operating mode, transmitting a next message in response to a user input (Fig 3, *after

the transmitter is trained a single user input will activate the receiver*).

However Teich doesn't disclose using sequentially encrypted counter values.

This limitation is addressed with regard to Claim 5.

Regarding Claim 17, Teich discloses a method further comprising identifying the type of receiver (Abstract, Fig 1 *the receiver is in contact with the transmitter and so must create a handshake that identifies it as the garage door opener*).

Regarding Claim 18, Teich discloses a method wherein the receiver is identified based on a radio frequency signal from the receiver (Abstract, Fig 1).

However Teich doesn't disclose identifying the type of receiver based on a radio frequency signal received from an original transmitter associated with the receiver

In the same field of endeavor, Chuey discloses identifying the type of receiver based on a radio frequency signal received from an original transmitter associated with the receiver (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 21, Teich discloses a radio frequency transmitter wherein the single user input is a button press (Fig 2, [0046]).

Regarding Claim 22, Teich discloses a method comprising commanding the receiver to enter a training mode by pressing a button on the receiver (Fig 2, [0046]).

Regarding Claim 23, Teich discloses a method wherein, after the receiver is in the training mode, transmitting at least three messages to the receiver in response to the single user input (64 of Fig 4).

However Teich doesn't disclose using sequential encrypted counter values.

This limitation is addressed with regard to Claim 5.

Regarding Claim 24, Teich discloses a method wherein the message causes the receiver to open a garage door ([0050]).

However Teich doesn't disclose using sequentially encrypted counter values.

This limitation is addressed with regard to Claim 5.

Regarding Claim 25, Teich discloses a radio frequency remote control system, comprising:

a transmitter integrated into a vehicle interior element and configured to send at least two messages in response to one user input (Fig 4, [0048], [0049]); and

a receiver configured to synchronize with the transmitter based on the two messages (Abstract, Fig 4, [0048], [0049]).

However Teich doesn't disclose using sequential transmission of a rolling-code system.

In the same field of endeavor, Chuey discloses using sequential transmission of a rolling-code system (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 26, Teich discloses a radio frequency remote control system, wherein the receiver is configured to activate a garage door opener to move the garage door in response to the two messages (Fig 4, Abstract).

Regarding Claim 27, Teich discloses a radio frequency remote control system, wherein the transmitter is configured to send at least two messages each of the first N times the user input

is actuated (Abstract, Fig 4), wherein N is at least two, and thereafter to send one of the messages

in response to a single user input (Fig 2, [0049], *after the transmitter is trained a single user*

input will activate the receiver).

       However Teich doesn't disclose using a sequentially encrypted counter value.

       This limitation is addressed with regard to Claim 5.

       Regarding Claim 28, Teich discloses a radio frequency remote control system, wherein

the transmitter is configurable by a user to activate a receiver (Abstract).

       However Teich doesn't disclose activating a plurality of different receivers.

       In the same field of endeavor, Chuey discloses activating a plurality of different receivers

(Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

       Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid

false alarms and prevent different transmitters from controlling a specific controller.

       Regarding Claim 29, Teich discloses a method of training a transmitter to a receiver in a

radio frequency control system (Abstract, Fig 1), the improvement comprising:

in response to a single user input, providing at least two messages and transmitting the two

messages to the receiver (Fig 4).

       However Teich doesn't disclose using a rolling code encryption algorithm to provide

sequential counter values.

       In the same field of endeavor, Chuey discloses using a rolling code encryption algorithm

to provide sequential counter values (Abstract, Fig 3, Col 5 Lines 32-47).

       Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a successful transmission of

the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 30, Teich discloses a method comprising sending the same transmitter

identifier with the message, wherein the message causes the receiver to open a garage door

(Abstract, Fig 1).

However Teich doesn't disclose using sequential counter values in messages to open a

garage door.

In the same field of endeavor, Chuey discloses using sequential counter values in

messages to open a garage door (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify Teich with Chuey in order to ensure a successful transmission of

the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Response to Arguments

4.   Applicant's arguments filed 7/2/09 have been fully considered but they are not persuasive

for the following reasons:

Arguments:

a.   Independent Claim 1 would not have been obvious in view of Teich, alone or in

        any proper combination with Chuey, under 35 U.S.C. § 103(a). Teich alone or in any

        proper combination with Chuey, does not disclose, teach or suggest a "radio frequency

        transmitter integrated into a vehicle interior element" comprising, in combination with

        other elements, "wherein the transmitter is configured to send at least two of the

messages having encrypted rolling values in response to a single user input, the encrypted

rolling values being from a sequence of rolling values, wherein the encrypted rolling

values of the at least two messages are sequential values" as recited in Claim 1, as

amended.

b.   Applicant respectfully submits that sending the same message multiple times, as

disclosed by Teich, is not the same as sending "at least two of the messages having

encrypted rolling values in response to a single user input, the encrypted rolling values

being from a sequence of rolling values, wherein the at least two messages are sequential

in the sequence of rolling values, wherein the encrypted rolling values of the at least two

messages are sequential values" as recited in Claim 1, as amended. Thus, Teich does not

disclose, teach or suggest "a radio frequency transmitter" for sending "at least two of the

messages having encrypted rolling values in response to a single user input, the encrypted

rolling values being from a sequence of rolling values, wherein the at least two messages

are sequential in the sequence of rolling values, wherein the encrypted rolling values of

the at least two messages are sequential values" as recited in Claim 1, as amended.

c.   In the Chuey reference each activation signal sent in the sequence of activation

signals corresponds to a different rolling code scheme. Unlike Chuey, in the present

application, the at least two messages being transmitted, as a result of the single user

input, are part of the same rolling code scheme.

         Applicant respectfully submits that sending an activation code for one scheme

followed by an activation code of another scheme is not the same as sending "at least two

of the messages having encrypted rolling values in response to a single user input, the

encrypted rolling values being from a sequence of rolling values, wherein the at least two

messages are sequential in the sequence of rolling values" as recited in Claim 1, where

the two messages are sequential messages in the same scheme. Thus, Chuey does not

remedy the failure of Teich to disclose, teach or suggest "a radio frequency transmitter"

for sending "at least two of the messages having encrypted rolling values in response to a

single user input, the encrypted rolling values being from a sequence of rolling values,

wherein the at least two messages are sequential in the sequence of rolling values" as

recited in Claim 1, as amended.

d.   Applicant respectfully submits that Teich and Chuey do not disclose, teach or

suggest the control system of Claim 16 for reasons similar to those provided with respect

to independent Claim 1.

e.   Applicant respectfully submits that Teich and Chuey do not disclose, teach or

suggest the control system of Claim 25 for reasons similar to those provided with respect

to independent Claim 1.

f.   Applicant respectfully submits that Teich and Chuey do not disclose, teach or

suggest the control system of Claim 29 for reasons similar to those provided with respect

to independent Claim 1.

g.   To transform Teich and Chuey into the subject matter of Claims 1, 16, 25 and 29

would require still further modification, and such modification is taught only by the

Applicant's own disclosure. Thus, Claims 1, 16, 25 and 29, considered as a whole, would

not have been obvious in view of Teich and/or Chuey.

h.   The rejection of Claims 1, 16, 25 and 29 over Teich in view of Chuey under 35

U.S.C. § 103(a) is improper. Therefore, Claims 1, 16, 25 and 29 are patentable over Teich

in view of Chuey.

Responses:

a.   The argument is not persuasive for the reasons stated below.

b.   The argument is admitted in the rejection of Claim 1.

c.   The argument states, "sending an activation code for one scheme followed by an

activation code of another scheme is not the same…" It is not clear which scheme is

being addressed. If it is Teich's scheme versus Chuey's scheme, or if it is Chuey's

scheme for one device versus Chuey's scheme for another device. Both have been taken

into account.

        i. Considering the first alternative, Teich's scheme is being replaced by Chuey's

scheme to create the combination:

Teich refers to sending a training code and an operating code, but does not specify a

sequential rolling code. Chuey teaches a universal remote control operating in a rolling

code or a fixed code, used to activate a garage door or another device. Further, Chuey

teaches that a known sequential rolling code is used for activation. In response to an

argument against references individually, nonobviousness cannot be shown by attacking

references individually where the rejection is based on a combination of references.

        ii. Considering the second interpretation where there are two different schemes

for different devices each with a rolling code:

From Chuey it reads, "*one* or more appliances may be trained…if the appliance is

activated by a rolling code activation signal, *a sequence* of *different* rolling code

activation signals is transmitted until the user indicates a successful transmission"

(Abstract, emphasis added; also see the rejection of Claim 1). Therefore, Chuey does

teach sequential rolling codes transmitted within any one of a number of different

schemes.

For the record the claims are broader than argued.   A "scheme" is not required by the

claim limitations; just two messages, each message having a rolling code value and each

sequentially generated. Chuey generates sequential rolling codes, and therefore reads on

the claim language.

d,e,f.   The arguments are not persuasive for the reasons stated above.

g.   The combination of Teich and Chuey would not require further modification, but

reads on the independent Claims, for the reasons stated above.

h.   The rejections are proper for the reasons stated above.

Conclusion

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

      A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mark Rushing whose telephone number is (571)270-5876. The

examiner can normally be reached on Monday-Friday 8:30AM to 5:00PM EST (Alt Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MR/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612